

## ABSTRACT

The invention relates to bone compression devices and bone compression systems, and in particular, to bone compression devices and systems for use in connection with vertebrae. The bone compression devices and bone compression systems are disposed, or installed, along at least one bone to maintain the at least one bone in a desired spatial relationship. Broadly, the invention is directed to a bone compression device for placing in communication with at least one bone having a bone radius of curvature, the bone compression device comprising a plate having a pre-formed shape, a deformed shape, and at least one elastic shape therebetween, the pre-formed shape having a pre-formed radius of curvature less than the bone radius of curvature, the deformed shape having a deformed radius of curvature greater than the bone radius of curvature, and at least one of the at least one elastic shapes having an elastic radius of curvature that substantially corresponds to the bone radius of curvature. The invention is also directed to bone compression systems having a bone compression device and a tensioner for facilitating the movement of the plate from the pre-formed shape to the at least one elastic shape. Methods of maintaining a bone in a spatial relationship and methods of contouring the bone compression devices are also disclosed.